

2917



Diag. Chd. No. 1107

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. T. Mann
Superintendent.

State: *Mass*

DESCRIPTIVE REPORT.

Hyd C Sheet No. *2917*

LOCALITY:

Georges Bank

1907

CHIEF OF PARTY:

L. H. Westdahl

U. S. COAST AND GEOD. SURV.
LIBRARY AND ARCHIVES.

JAN 27 1908

Acc. No. *2917*

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DESCRIPTIVE REPORT

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RECEIVED
COAST AND
GEODETIC SURVEY
GRAPHIC SHEET OF GEORGES BANK SURVEY,
LIBRARY AND ARCHIVES.
of Steamer BACHE

JAN 27 1908

RECEIVED
BY ASSISTANT IN CHARGE
AND REFERRED TO
JAN 25 1908

JAN 16 4 13 PM 1908

L.H. Westdahl, Chief
Acc. No.

1. Method of Survey. Three white surveying buoys had been dropped at places on Georges Bank designated by the Chief of Party, by the Light-House Tender MAYFLOWER, to be used as points of departure and terminal points for lines of soundings over the Bank. The positions of these buoys were determined astronomically by the party on the Steamer BACHE, with the vessel anchored close to these buoys, and observations were several and covered some time when the best conditions for latitude and longitude determinations could be had.

In running the lines of soundings called for by the Superintendent's instructions, the ship's position was determined at frequent intervals by the usual methods in clear weather and opportunity taken as often as was practicable to tie up on one of the surveying buoys. In foggy weather it became imperative to endeavor to make a landfall on one of these buoys, in order to plot the line. To find one of these buoys in a fog was a matter of difficulty, the bell and whistle could only be heard at a distance of one-quarter mile and landfalls within this distance are of course impossible on Georges Bank on account of the strong currents. The most feasible course to pursue was to run down the dead reckoning for the buoy, and then if it was not visible on account of the fog, anchor and wait clear weather.

Soundings were taken with the hand lead and also with the Cosmos machine, to the wire of which was attached a Tanner-Bliss sounding tube. Comparisons between the two were frequently made and showed the latter to be registering correctly.

A speed of eight knots was maintained between soundings and the speed was checked at each sounding. The Patent Log used was checked over the measured mile at Provincetown, Mass. and found to register a nautical mile exactly.

Currents were observed by the BACHE's party and recorded in proper volumes, which have since been transmitted to the Superintendent. The time of change and direction were found to agree closely with predicted currents given in the Coast and Geodetic Survey Tide Tables. Currents were found to move ^{more} appreciably, when inside the 25-fathom curve on the Bank.

Any marked shoaling was well defined by tide rips in a current setting across the direction of the ridge of the shoal, though in a current setting fair with the direction of the shoal, there was no evidence of its existence. There were many rips encountered during the survey as will be noted in the column "Condition of sea" on the sounding sheets. These rips are permanent and should be developed, and it is the opinion of the Chief of Party that after thorough development, much shoaler² will have been found on Georges Bank, than is now shown on the Coast Survey Charts.

The Chief of Party had planned during the past field season on Georges to first fill in the large gaps where there were no soundings in the published chart, in accordance with instructions, then take up the development of the various rips encountered.

The weather was persistently bad during the season. Foggy weather prevailed and a clear spell was generally preceded by a north-west gale which combined with the current raised a large sea. The

best spell of weather encountered was during the middle of September when one week of calm clear weather was had and much work was accomplished. The best time to work on Georges Bank is with westerly winds or following a stiff northwester, when for several days clear fine weather will prevail.

Respectfully submitted

L. H. Meade

Asst. C. & G. Pursey

Febrary —

For Description Report
of Hyd 2917.

DMA

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY
FORM 153

DATE BORROWED	TOPOGRAPHIC SHEET NUMBERS	

WRITE ONLY CONSECUTIVE NUMBERS ON THIS TICKET.

11-6882

Hyd Sheet 2917, Georges Bank.

The sheet has been accepted as plotted in the field - verification revealed no errors that could be corrected from the records - In combining with previous surveys to define the 50 fathom curves the difference was divided in proportion of 2 to 1 in favor of the work of 1907 -

The configuration of the Bank as shown by the 10 & 20 fath curves was modified and charted as shown on tracing attached -

No noticeable change in Bank in position or depth appears from comparison with previous survey -

J. E. M.

3-27-08

Statistics for Steamer Bache.

Totals: Soundings (Wire, 807

(Hand Lead, 35, Miles, Nautical 1566.7

(Miles sq., 285.

Definite positions determined by astronomical observations or bearings, 104

DATE	LETTER	VESSEL	
Aug. 2-4, 1907	A	Steamer	Bache.
" 7, 1907	B	"	"
" 11-13, 1907	C	"	"
" 20, 1907	D	"	"
" 21,	E	"	"
" 22, 1907	F	"	"
" 22-23, 1907	G	"	"
" 23-24, 1907	H	"	"
" 27, 1907	I	"	"
" 27-29, 1907	J	"	"
Sept 9, 1907	K	"	"
" 10-12, 1907	L	"	"
" 12, 1907	M	"	"
" 13-14, 1907	N	"	"
" 14, 1907	O	"	"
" 20-21, 1907	P	"	"
" 27-28, 1907	P	"	"
" 28-29, 1907	Q	"	"

✓ 8/11.